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SIXTH
Annual Report
of the

Armed Forces Pest Control Board

FY-1963



Forest Glen Section
Walter Reed Army Medical Center
Washington D.C., 20012

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Title: Military Preventive Medicine

Task No. 0

Title: Ecology and Control of Disease
Vectors and Reservoirs

15 August 1963

## SIXTH ANNUAL REPORT

of the

#### ARMED FORCES PEST CONTROL BOARD

Fiscal Year 1963

#### I. DESCRIPTION

The wide geographic distribution of military personnel and installations challenges the entomologist with an unprecedented variety and complexity of problems in controlling insects and related pests of medical and economic importance to military operations. These problems are further complicated by the continued development of resistance by insects to many of the insecticides and by the increasing concern as to the cafe usage of toxic chemicals and their accumulation in the environment. Solution of these problems, therefore, requires maximum cooperation between agencies and full utilization of available technical aid. These are the primary objectives of the Board.

This report summarizes activities of the sixth full year of operations of the Board, established by Department of Defense Directive 5154.12 (OASD-H&M), 17 November 1956 and revised on 21 August 1962. Board membership is listed in enclosure (1). Liaison membership with agencies having similar professional and technical interest has provided a maximum interchange of information and a useful working relationship. Agencies that have established liaison membership are also listed in enclosure (1).

The report is presented for the information and guidance of the sponsoring, participating, and monitoring agencies. Further details concerning activities briefly discussed in the report are available upon request. Comments and suggestions for improving the Board's service to the military departments are invited.

#### II. PROGRESS

Significant activities of the Board in meeting its assigned functions and responsibilities are indicated below.

## A. Research and Development

## 1. Intra-Service (In-service and contract)

The Board has provided for the coordination and interchange of information on pest control research as follows:

- a. Reviewed and recommended on proposed projects submitted by member agencies.
- b. Reviewed plans for coordinated field testing of promising insecticides at military installations in the Panama Canal Zone.
- c. Coordinated service policy on concentrated allethrin aerosols on the basis of Army Quartermaster Service tests.
- d. Developed joint recommendations on standardization of the repellent deet in pressurized spray and liquid formulations for surface treatment of uniforms.
- e. Recommended and coordinated joint field studies by the Fish and Wildlife Service, University of Delaware, and Army Environmental Hygiene Agency on the effects of promising new mosquito larvicides on fish and wildlife.

## 2. Advisory Service to the U. S. Department of Agriculture Research Program on Military Entomology

- a. The Board is advised of progress under this program at regular meetings through liaison representatives from the Department of Agriculture and by routine quarterly reports submitted by the Agricultural Research Service, the Agricultural Marketing Service and the Forest Service.
- b. The annual program review was held at the Forest Glen Section of Walter Reed Army Medical Center, Washington, D. C. in February 1963. Detailed presentations of work in progress were made by U.S.D.A. investigators and the comments, suggestions and recommendations of the Board with respect to this program were transmitted

to enpropriate U. S. D. A. administrators. Requests for technical advice or for investigations of special problems raised by member agencies were forwarded to the U. S. D. A., as necessary.

c. The Board assisted the U.S.D.A. in obtaining continued Navy support of research in the use of lures and the sterile male technique for fruitfly eradication in the Mariannas Islands by airdrops and logistic support. This project was terminated on 30 June 1963 upon confirmation of eradication of the melon fly from the island of Rota.

#### B. Operations

## 1. Technical Guidelines

 a. The following Technical Information Memoranda were prepared or revised, and distributed.

TIM No. 5 "The Mediterranean Snail Problem"

TIM No. 6 "Current Pest Control Recommendations"

TIM No. 7 "Protection and Preservation of Timber"

TIM No. 10 "The Safe Use of Pesticides"

- b. An Information Bulletin on approved methods for the disingection of aircraft was prepared and distributed.
- c. Cognizant agencies were provided with technical data on new control methods for Japanese beetle quarantine.
- d. The Property and Material Committee met with representatives of the Defense Construction Supply Center, DSA, to recommend on requirements of the military services for dispersal equipment. As a result the number of items on the military standard list for this category was reduced from over 80 to 15.
- er A draft of Civil Air Regulations on aircraft dispersal of pesticides was reviewed and forwarded to military units with primary interests in this subject.
- f. Editing of draft material for a triservice manual on control of disease vectors and pests.

#### 2. Insect Resistance Problems of the Armed Forces

- a. Distribution of World Health Organization resistance test kits and standard insecticides to military units was coordinated through the Army Environmental Hygiene Agency.
- b. Data on the insecticide resistance and/or susceptibility of insects of medical importance throughout the world are maintained. New accessions are placed in the optical coincidence retrieval system in preference to the edgepunch card file which has been used in the past.

#### C. Administration

- 1. Arrangements were made for four regular meetings of the Board during FY 1963. Agenda, notices and minutes were prepared and distributed, reports assembled, and correspondence prepared as required as the result of Board actions.
- 2. The 1956 DoD directive which established the Armed Forces Pest Control Board was revised effective 21 August 1962 to provide for the operation of information services.
- 3. Agency representatives to the Board were designated by the Defense Construction Supply Center and the Defense Petroleum Supply Center. The Chief of Staff, Systems and Logistics, USAF, designated a regular member to the Board.
- 4. A new standing committee on the \*filitary Entomology Information Service was established to provide technical guidance by the Board.
- 5. The administrative assistant to the Executive Secretary has also provided administrative services to the Officer in Charge of the Military Entomology Information Service on personnel, fiscal and supply matters.

#### D. Liaison Activities

 The Board has maintained liaison for the Department of Defense with many other agencies in entomology and related biological sciences. During the fiscal year the Board was represented at meetings of the following: Federal Pest Control Review Board
Interdepartmental Committee on Pest Control
Armed Forces Epidemiological Board
Canadian Defence Research Board
Entomological Society of America
American Mosquito Control Association
U. S. Department of Agriculture,
Animal Inspection and Quarantine Division,
Agricultural Research Service

- 2. The Executive Secretary attended 14 meetings of the Federal Pest Control Review Board as a Department of Defense member and represented the Department of Defense at several meetings of the Federal Council on Science and Technology involving considerations of the use of pesticides.
- 3. The following position papers of the Department of Defense on the nationwide interest in the pesticide situation were developed by ad hoc committees of the Board.
  - a. Department of Defense Programs and Problems Involving the Use of Toxic Chemicals for Pest Control. A report to the Pesticide Panel of the Federal Council on Science and Technology, 20 September 1962.
  - b. Comments on Life Sciences Panel,
    President's Science Advisory Commentate, Working Paper on Pesticides,
    requested by Deputy Assistant Secretary
    of Defense (Health and Médical).
    27 February 1963.
  - c. Information on Legislative or Budgeting Recommendations Necessary to Implement Recommendations of the President's Science Advisory Committee on the Use of Pesticides, requested by the Deputy Assistant Secretary of Defense (Health and Medical). 7 June 1963.
  - d. Department of Defense Activities Related
     to Pesticides. Requested by the Surgeon General, Department of the Army, for use

in preparation of material to be presented by the Department of Defense to the Senate subcommittee investigating pesticides. 14 June 1963.

- 4. The Board was a joint sponsor with the Building Research Advisory Board, National Academy of Sciences-National Research Council; the National Pest Control Association, and Purdue University of a Workshop on Termite Research held at Purdue from 14-16 November 1962.
- 5. At the invitation of the U. S. Public Health Service, the Board held a regular meeting at the Communicable Disease Center, Atlanta, Georgia on 29-30 November 1962.
- 6. Requirements of the military departments were coordinated with the Public Health Service for their "Handbook on Economic Poisons."
- 7. The Property and Material Committee reviewed a film script, "Don't Bring Your Enemy Home" prepared by the U. S. Department of Agriculture and designed to instruct military personnel how to avoid introducing agricultural pests and diseases to the United States and to motivate their cooperation. The Board is coordinating clearance of this film with the appropriate military agencies.
- 8. Data on aircraft dispersal of insecticides by the Armed Forces were provided to the National Mosquito Control-Fish and Wildlife Management Coordination Committee.
- 9. Toxicological studies by the Communicable Disease Center, Public Health Service, on Navy pest control operators using dieldrin were coordinated with cognizant Navy bureaus.

#### E. Information and Training Activities

Activities pertaining to the provision of technical information and training have included the following:

1. The Quarterly Armed Services Research and Development Report on Insect and Rodent Control (numbers 57 through 60) was produced and distributed to interested agencies. This provides a timely periodic resume of research conducted by or for the military services on disease vector and pest control problems.

- 2. The Fourth Course in Military Entomology was presented from 29 July to 11 August 1962 at the U. 3. Naval Medical School, Bethesda, Maryland.
- 3. The Directory of Military Entomologists was revised and distributed.
- 4. A proposal for a six week Training Course in Research Entomology at the U. S. Department of Agriculture Laboratory at Gaineaville, Fiorida, for active duty personnel was developed and submitted to the Surgeon General. This has been approved and quotas established for 1964.
- 5. Pamphlets, handbooks and other publications containing technical information of value to field personnel were obtained and provided to Board members for distribution within their respective agencies.

# F. Military Entomology Information Service

## 1. Background

## a. Establishment

- (1) Established by authority of DoD Directive 0154.12 of 21 August 1962, as a function of the Armed Forces Pest Control Board, at the Forest Glen Section, Walter Reed Army Medical Center, and implemented through agreement among the Surgeons General of the Army, Navy and Air Force.
- (2) A study of 21 information centers in the Washington, D. C. area was made in order to determine the system best suited to the needs of the Armed Services.

#### b. Personnel

#### (1) Professional

The Army and Navy have each provided a senior entomologist of the Medical Service Corps. An Air Force entomologist will report in August 1963.

(2) Civilian, Non Professional

1 Secretary, 2 Clerk Typists

#### c. Budget

velopment. Civilian personnel for data processing and retrieval are provided through a Research and Development grant to the Biological Sciences Communications Project (formerly American Institute of Biological Sciences) now administered by George Washington University.

## 2. Operations

## a. System

(1) The procedure adopted by AFPCB-MEIS employs an optical coincidence input and retrieval system, coordinated with an electronic semiautomatic writing center and an electrostatic reproduction unit. These components comprise what is popularly recognized as an "Integrated Data Processing System."

#### b. Guidance

- (1) A committee of Armed Forces Pest Control Board members was appointed to furnish technical operational guidance to the Information Service. This committee met in October and December 1962, and in April 1963 and recommended the following:
- (a) Procurement of an optical coincidence system integrated with an electronic writing and coding system.
- (b) Priorities for the Military Entomology Information Service effort.
- 1 Priority be given to geographical treatments of southeast Asia followed by the tropical portions of Central and South America.
- (c) Announcement of available services to military entomologists.
- (d) Preparation and distribution of timely technical notes and state-of-the-art reviews.

#### c. Progress

- (1) The actentific information from approximately 2,000 references has been accessed.
- (2) A letter announcing the available services, asking for individual scientific interests and inviting participation has been forwarded to military entomologists, parasitologists, epidemiologists, preventive medicine specialists and others in related disciplines. The forwarding of pertinent entomologic information from the field to the Military Entomology Information Service also was encouraged.
- (3) Queries from the following activities have been processed by the Information Service:

Department of Defense	9
Other Federal Agencies	2
Government Contractors or	5
Science Organizations	
World Health Organization	ì
National Referral Center	
for Science and Technology,	
Library of Congress	1

## 3. Objectives

- a. Prepare and maintain entomologic information arranged by geographic areas of active or probable military interest, for distribution as required to military organizations.
- b. Respond to requests from individuals or organizations for specific information on military entomology and prepare technical notes and reviews when required.
- c. Distribute automatically and periodically new accessions or bibliographic citations of selected accessions to individuals whose fields of interest are made known to the Armed Forces Pesi Control Board.
- d. Furnish to military units upon request copies of reprints on entomologic (or allied) subjects not available from Defense Documentation Center or library facilities.

## 4. Official Contacts and Instructions

- a. Department of Defense Instruction 5129.43 of 22 January 1963, "Assignment of Functions for the Defense Scientific and Technical Information Program" provides for the supervision, coordination and review of the DoD Scientific and Technical Information Program, and for a Director of Technical Information on the staff of the Director of Defense, Research and Engineering.
- b. On 25 April, the Military Entomology Information Service was visited by Army Research Office representatives as part of the Army Research Office "on site" survey program. At this conference it was recommended that the AFPCB-MEIS staff appear before the Department of the Army Office of the Chief, Research and Development Scientific and Technical Information Group to present the objectives and features of the Military Entomology Information Service system.
- c. On 2 May, the Armed Forces Pest Control Board staff was invited to the Army Research Office for the purpose of presenting the Military Entomology Information Service system and obtaining clarification of responsibilities.
- d. The Director of Technical Information, Office of the Director of Defense, Research and Engineering, visited the Military Entomology Information Service on 11 June, as part of the "on site" survey program.
- e. The Armed Forces Pest Control Board staff called upon the Defense Documentation Center on 18 June to initiate coordination of the military entomology microthesaurus with the Defense Documentation Center program.

## III. SUMMARY AND CONCLUSIONS

During its sixth year the Armed Forces Pest Control Board has continued to emphasize the development of uniform policies and procedures in pest control matters and the application of joint efforts in research and operational projects in which all three services have a major interest. There has been a considerable expansion of coordination with other Federal agencies and of information activities. The

establishment of the Military Entomology Information Service is particularly noteworthy. These activities have been made possible by the full support of the Department of Defense, the members of the Board, and the agencies they represent.

Enclosure (1)

HAROLD D. NEWSON
Lt Colonel MSC, USA
Chairman

W. B. HULL

Commander, MSC, USN Vice Chairman

RICHARD T. HOLWAY
Captain MSC, USN
Executive Secretary

# THE ARMED FORCES PEST CONTROL BOARD Walter Read Army Medical Center Forest Glen Section Washington, D. C. 20012

# MEMBERSHIP (30 June 1963)

Agency	<u>Member</u>	Alternate
ARMY		
Surgeon General	Lt Cel H. D. Newson, Chairman	Dr. D. J. Goul
(Research & Development)		
Surgeon General	Lt Col P. M. Altman	
(Preventive Medicine)	医内脏多种 医二氯酚 數數數數 经强度人	<b>"我们看来我们</b> "。
Chief of Engineers	Mr. W. D. Reed	Mr. S. C. Dev
Chief of Research and	Lt Col T. D. Boaz, Jr.	Dr. E. M. Spor
Development		
Army Material Command	Mr. S. A. Goldberg (Acting)	
en transfer de la companya de la co		
NAVY		
Chief, Office of Naval Research	Dr. S. R. Galler	Mrs. Helen Ha
Chief, BUMED	Cdr W. B. Hull	Cir J. W. Mill
Chief, BUDOCKS	Mr. G. L. Hutton	Mr. R. Z. Page
Chief, BUSANDA	Mr. F. L. Wellington	
AIR FORCE		
Surgeon General	Lt Col J. M. Geary	Capt C. T. Ada
Dir of Civil	Mr. R. H. Vincent	, , , , , , , , , , , , , , , , , , ,
Engineering		
Surgeon General	Major T. J. Curtin	Capt C. J. Hod
(6570th Epidemiclogical		
. Laboratory)		
Dir of Supply & Services	Mr. P. G. VanVoorhis	
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	LIAISON MEMBERSHIP	

U. S. Department of Agriculture	Dr. H. 1	. Haller
U. S. Department of Interior	Mr. H.	A. Merrill
U. S. Department of Health, Education and Welfare	Dr. S. V	V. Simmons

Member

Agency

## LIAISON MEMBERSHIP (Cont'd)

## Agency

National Science Foundation
Canadian Defence Research Board
Surgeon General, Canadian Forces
Canadian Joint Staff
British Joint Services Mission
U. S. Coast Guard
National Academy of Sciences
(Prevention of Deterioration Center)
Interdepartmental Committee on Pest Control
Agency for International Development
National Research Council

## Member

Dr. George Sprugel, Jr. Mr. I. S. Lindsay Mr. A. E. Winmill Lt Col A. M. Davidson Col G. W. Reid Capt J. H. LeVan Dr. C. J. Wessel

Mr. W. D. Reed Mr. D. R. Johnson Dr. H. W. Hayes

## AGENCY REPRESENTATIVES

## Agency

Pan American Health Organization
U. S. Marine Corps
U. S. Army Environmental Hygiene Agency
U. S. Continental Army Command
Defense Construction Supply Center
Defense Petroleum Supply Center

# Member

Dr. J. Austin Kerr Capt J. M. Hirst

Mr. J. R. Stough Mr. W. L. Bebuen Mr. J. O. Lamphier

## STAFF

Executive Secretary
U. S. Navy Representative (OIC) MEIS
U. S. Army Representative MEIS
U. S. Air Force Representative MEIS
Administrative Assistant
Secretary, MEIS
Clerk Typist, MEIS
Clerk Typist, MEIS

Capt R. T. Holway Capt J. D. DeCoursey Lt Col F. G. Favorite

Mrs. S. W. Schwartz Mrs. F. B. Morrison Mrs. B. A. Saul Miss Janice Boley